

1 Remarks

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3 Amendments to Claims:

4 The claims have been amended in accordance with the revisions to 37 C.F.R.
5 1.121 as set forth in 1267 OG 106 (25 February 2003).

6 Claim 1 has been amended to recite that the outer layer is metal. Support for this
7 amendment can be found in the specification at line 6 of paragraph 0015.

8 Claim 14 has been amended to change its dependency from claim 12 to claim 7.

9 Claim 15 has been amended to recite a pair of temperature sensors. Support for
10 this amendment can be found in the specification at paragraph 0033.

11 Claim 16 has been amended to recite that the outer layer is metal. Support for
12 this amendment can be found in the specification at paragraph 0015.

13 Claims 34, 35, 36, and 37 have all been amended to change their respective
14 dependencies from claim 1 to claim 15 and to delete the recitation of the pair of
15 temperature sensors in order to prevent redundancy with respect to claim 15.

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17 Rejection of Claims Under 35 U.S.C. § 102:

18 Claims 1-3, 9-11, 15-17, and 26-28 have been rejected under 35 U.S.C. § 102(b)
19 as being anticipated by US Patent 6,389,261 B1 to Fratangelo et al. ("Fratangelo").

20 A well known tenet of United States patent law is that "[a] claim is anticipated only
21 if each and every element as set forth in the claim is found, either expressly or inherently
22 described, in a single prior art reference." (MPEP 2131). In other words, "[t]he identical
invention must be shown in as complete detail as is contained in the . . . claim." (MPEP
2131).

23 The Examiner, in paragraph 2 of the Office action, contends that Fratangelo
24 discloses a fuser assembly 100 comprising a fuser roller 108 having a heat absorptive
25 outer layer 112 on an inner core 110 of a thermally isolating material, a radiant heating
element 106 adjacent and externally to the outer layer of the roller. The Examiner
further contends that Fratangelo discloses the outer layer comprising an interior metallic

1 layer (conductive silicon layer) and an exterior release layer 114 and having a thickness
2 of less than 3 millimeters, and a pressure roller 104 disposed adjacent to the fuser roller.

3 As is noted above, the Applicant's claim 1 has been amended to more positively
4 recite that the outer layer is metal. This contrasts with Fratangelo which teaches that the
outer layer is silicon, as is noted by the Examiner in the Office action.

5 The Applicant asserts that silicon is not metal. Silicon is defined as "a
6 nonmetallic element [emphasis added]" (Webster's New World Dictionary, Second
7 College Edition, 1986). Thus, the Applicant asserts that Fratangelo does not anticipate
8 the Applicant's claim 1 because Fratangelo teaches that the outer layer is nonmetallic
9 while claim 1 recites a metal outer layer. In other words, with regard to the Applicant's
claim 1, Fratangelo teaches the opposite of what the Applicant claims.

10 In regard to claims 2 and 3, those claims have been canceled. Thus the
rejections with respect thereto are now moot.

11 In regard to claim 9, that claim depends from claim 1. Thus, the Applicant
12 asserts that because claim 1 is not anticipated by Fratangelo, claim 9 is similarly not
13 anticipated by Fratangelo for the reasons set forth above with respect to claim 1.

14 In regard to claims 10 and 11, those claims have been canceled. Thus, the
rejections with respect thereto are now moot.

15 In regard to claim 15, that claim has been amended as noted above to recite a
16 pair of temperature sensors configured to measure a temperature differential
17 therebetween. In contrast, Fratangelo does not disclose a pair of temperature sensors
18 configured to measure a temperature differential therebetween. Thus, because claim 15
19 recites a pair of temperature sensors that are not disclosed by Fratangelo, the Applicant
asserts that claim 15 is not anticipated.

20 In regard to claim 16, that claim depends from claim 15. Thus, the Applicant
21 asserts that because claim 15 is not anticipated by Fratangelo, claim 16 is similarly not
22 anticipated by Fratangelo for the reasons set forth above with respect to claim 15.

23 Furthermore, claim 16 has been amended as noted above to recite that the outer
24 layer is metal. Thus, the Applicant asserts that claim 16 is not anticipated by Fratangelo
for the additional reasons as set forth above with respect to claim 1.

25 In regard to claim 17, that claim has been canceled. Thus, the rejections with
respect thereto are now moot.

1 In regard to claims 26, 27, and 28, those claims depend from claim 1. Thus, the
2 Applicant asserts that because claim 1 is not anticipated by Fratangelo, none of claims
3 26, 27, or 28 is anticipated by Fratangelo.

4 Moreover, in regard to claim 26, that claim recites an inner core substantially
5 fabricated from a foamed material or a particulate material. In contrast, Fratangelo
6 teaches, at column 5, lines 1-4, that the inner core is thick silicone rubber. Since thick
7 silicone rubber is not foamed material, nor particulate material, the elements recited by
8 claim 26 are not anticipated by Fratangelo.

9 For at least the above reasons the Applicant contends that claims 1-3, 9-11, 15-
10 17, and 26-28 are not anticipated by Fratangelo. Accordingly, the Applicant respectfully
11 requests that the rejections with respect to those claims be withdrawn and that claims 1,
12 9, 15, 16, and 26-28 be allowed.

13 Rejection of Claims Under 35 U.S.C. 103:

14 Claims 4-6, 13-14, and 33-37 have been rejected under 35 U.S.C. 103(a) as
15 being unpatentable over Fratangelo in view of U.S. Patent 6,442,366B1 to Hartley et al.
16 ("Hartley").

17 Furthermore, claims 7-8, 12, 18-25, and 38-40 have been rejected under 35
18 U.S.C. 103(a) as being unpatentable over Fratangelo in view of U.S. Patent 5,708,920 to
19 Ohnishi et al. ("Ohnishi").

20 Moreover, claims 29-32 have been rejected under 35 U.S.C. 103(a) as being
21 unpatentable over Fratangelo in view of U.S. Patent 6,505,027 B2 to Takeuchi et al.
22 ("Takeuchi").

23 The Applicant notes that only one of the above rejected claims (claim 19) is an
24 independent claim. Furthermore, of the claims rejected under obviousness, only claims
25 20-25 depend from claim 19. The remainder of the claims (4-8, 12-14, 18, and 33-40)
depend either from claim 1 or from claim 15.

Importantly, the Applicant notes that neither claim 1 nor claim 15 has been
rejected under 35 U.S.C. 103 for obviousness. As is stated in section 2143.03 of the
MPEP, "[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim
depending therefrom is nonobvious."

The Applicant notes that neither claim 1 nor claim 15 have been rejected for
obviousness and, therefore, both claims 1 and 15 are nonobvious under 35 U.S.C. 103.
The Applicant concludes that, in accordance with the above referenced tenet, all of the

1 claims that depend from either claim 1 or claim 15 are nonobvious. Specifically, since
2 claims 4-8, 12-14, 29-33, and 40 depend from claim 1, and since claims 18, and 34-39
3 depend from claim 15, and since claims 1 and 15 are nonobvious, then it follows that
4 claims 4-8, 12-14, 18, and 29-40 are nonobvious for the reasons stated above.

5 In regard to claim 19, that claim recites the following elements:

6 heating a fusing roller using only radiant heat directed toward a surface of said
7 fusing roller;

8 forming a nip region between said fusing roller and a pressure roller, wherein said
9 nip region has an infeed side and an outfeed side;

10 transporting the media into rolling contact with said fusing roller and through the
11 nip region to simultaneously heat said toner to a desired temperature and apply pressure
12 to the toner causing the toner to fuse to the media; and

13 detecting a temperature differential between said infeed side and said outfeed
14 side of said nip region.

15 As mentioned above, claim 19 has been rejected under 35 U.S.C. 103(a) as
16 being unpatentable over Fratangelo in view of Ohnishi.

17 As a starting point, MPEP 706.02(j) states:

18 "[t]o establish a *prima facie* case of obviousness, three basic
19 criteria must be met. First, there must be some suggestion or
20 motivation, either in the cited references themselves or in the
21 knowledge generally available to one of ordinary skill in the art, to
22 modify the reference or to combine the reference teachings.
23 Second, there must be a reasonable expectation of success.
24 Finally, **the prior art reference (or references when combined)**
25 **must teach or suggest all the claim limitations.** The teaching
or suggestion to make the claimed combination and the
reasonable expectation of success must both be found in the prior
art and not based on applicant's disclosure." (Emphasis added.)

1 With respect to claim 19, that claim includes the following salient limitation:

2
3 "detecting a temperature differential between said infeed side and said
4 outfeed side of said nip region."

5 Neither Fratangelo nor Ohnishi disclose detecting a temperature differential
6 between an infeed side of a nip region and an outfeed side of the nip region.

7 Accordingly, under the standard set forth above for a 103 obviousness-type
8 rejection, and with respect to claim 19, the rejection has been overcome because neither
9 Fratangelo nor Ohnishi disclose the limitation of detecting a temperature differential
between an infeed side of a nip region and an outfeed side of the nip region.

10 Further, it would not be obvious to one skilled in the art to detect a temperature
11 differential between an infeed side of a nip region and an outfeed side of the nip region.
12 That is, there is simply no suggestion or motivation, either in the references themselves
13 or in the knowledge generally available to one of ordinary skill in the art, to modify what
14 is described by Fratangelo or Ohnishi to result in what is contained in Applicant's
claim 19.

15 In regard to claims 20-25, those claims depend from claim 19. As is explained
16 above, a claim that depends from a nonobvious claim is itself nonobvious. Because the
17 Applicant contends that claim 19 is nonobvious, it follows that claims 20-25 are also
nonobvious for the reasons argued above with respect to claim 19.

18 For at least these reasons, the Applicant contends that claims 4-8, 12-14, 18-25,
19 and 29-40 are non-obvious over Fratangelo. Accordingly, the Applicant respectfully
20 requests that the rejections with respect to those claims be withdrawn and that the
claims be allowed.

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If the next Office action is anything other than a Notice of Allowance for claims 1, 12-16, and 18-40, the below-signed attorney respectfully requests that the Examiner call him before issuing the action.

Roland Boss, Applicant

By Thomas Oh

Application No. 09/996,711
Docket No. 10007748-1
Response to 3rd Office Action